

CELGARD[Our Company](#)[Products](#)[Technology](#)[News & Events](#)[Library](#)[Contact Us](#)**Products**[Celgard® Flat Sheet Membranes](#)[Properties](#)[Product Information](#)[Publications](#)[Battery Separator Reference Chart](#)[Battery Applications Lab](#)[Technical Service](#)[FAQs](#)**Flat Sheet Properties**

- Controlled uniform porosity
- Excellent resistance to acids, bases and many chemicals
- Permeability to gases and vapors
- Hydrophobic or hydrophilic variants
- Ability to be heat-bonded or laminated to a wide variety of woven or nonwoven materials

See product data sheets for specific product characteristics. If you have any questions, please [contact us](#) and a Celgard representative will assist you.

Parameter	Range
Porosity	30 - 60+%
Pore Size	0.02 x 0.08μ to 0.2 x 1.5μ
Thickness	8 - 50μ
Permeability, Gurley	5 - 100
Moisture Vapor Rate	4000 - 6000 gm/m ² /day @ 1 atm
Water Flow	20 - 400 l/m ² /hr @ 10 psig
Tensile Strength Machine Direction	15 - 19 kpsi
Tensile Strength Transverse Direction	1.2 - 2.2 kpsi
Electrical Resistance	~ 2.0 ohm/cm ²

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